

Montana DEQ Forest Fire Smoke Advisory

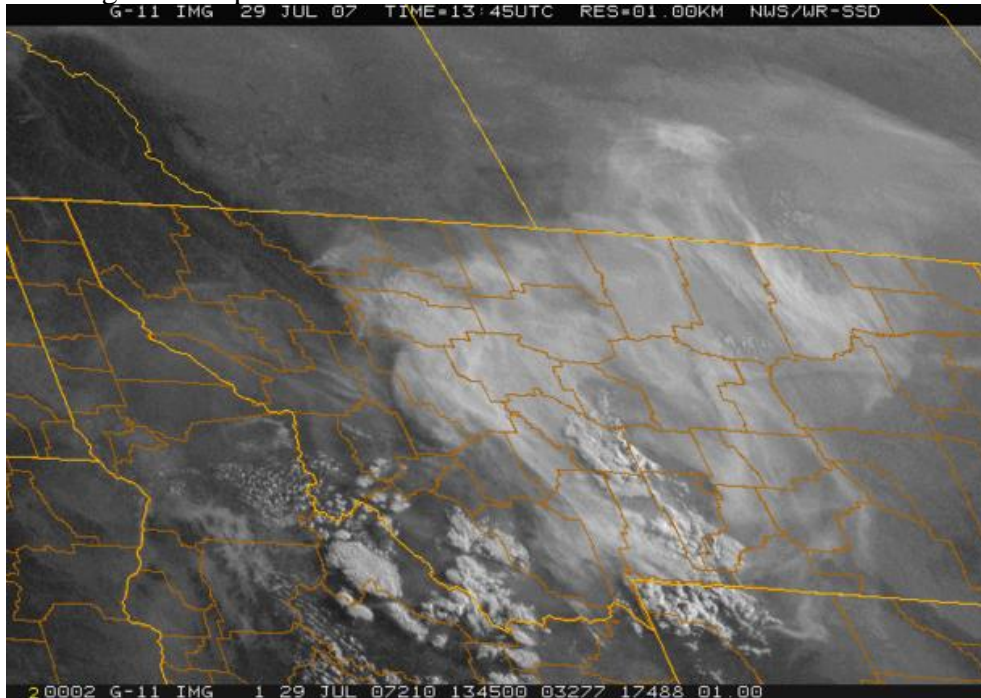
July 29 2007

10:00 AM Sunday

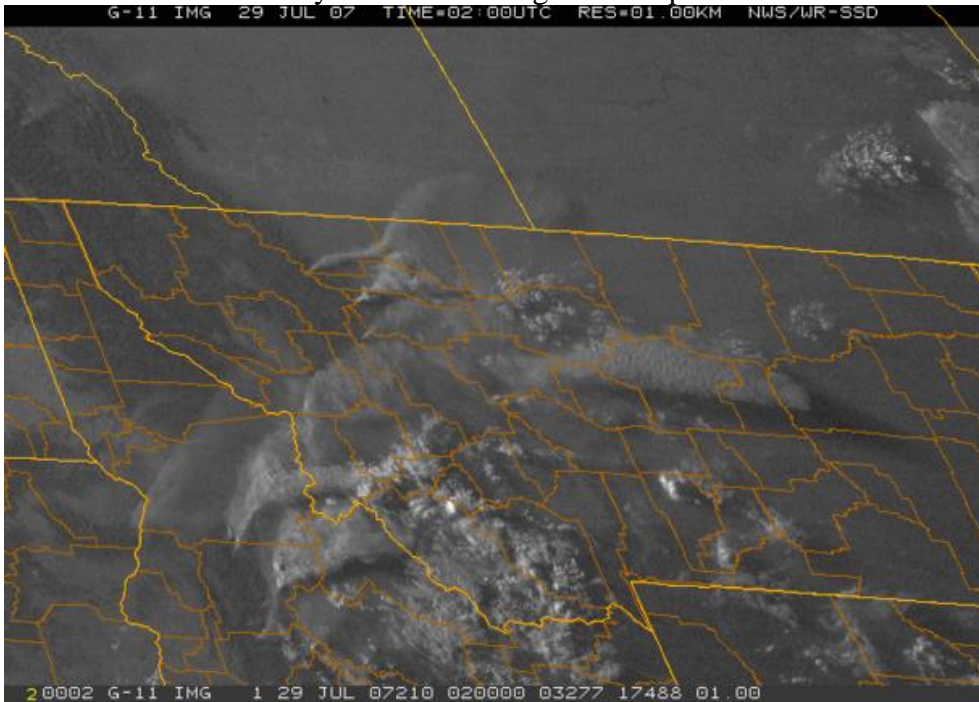
Current Situation

Smoke aloft is blanketing a huge part of Montana east of the continental divide this morning. The smoke was put up yesterday evening from fires in Idaho and Montana and has been stalled over the state under a persistent high pressure ridge. Smoke impacts at the surface are not too bad right now except in the Front Range area from Cut Bank to Great Falls. Conditions there are at the top of the [MODERATE](#) scale in most areas and Great Falls has lapsed into [UNHEALTHY FOR SENSITIVE](#) at this time. Conditions in the Front Range area will likely get worse later this morning as more smoke mixes down to the surface before improving later this afternoon. Hourly surface concentrations at the other reporting stations are not bad right now but the continuing haze has put the areas around Kalispell, Polson, Ronan, Missoula, Hamilton, Butte, and Helena into the [MODERATE](#) category. There is also a developing problem in the Clark Fork valley near Clinton where smoke from the Mile Marker 124 fire temporarily closed Interstate 90 last night. Smoke conditions in that area are expected to be [UNHEALTHY](#) or worse. Smoke impacts under the plume aloft will increase later this morning and local impacts from the fires active in Montana will be a problem today in many areas. See the forecast below for details. Residents near active fires or experiencing noticeable smoke levels should use the [VISIBILITY GUIDELINES](#) to determine smoke levels in their area and guide their activity decisions.

Morning satellite photo centered on Great Falls:



This satellite photo taken at 8 PM last night clearly shows the origin of the smoke spread across the state this morning. The plumes from the Skyland, Fools Creek, Ahorn, and Meriwether fires are very noticeable along with the plumes from the fires in Idaho.

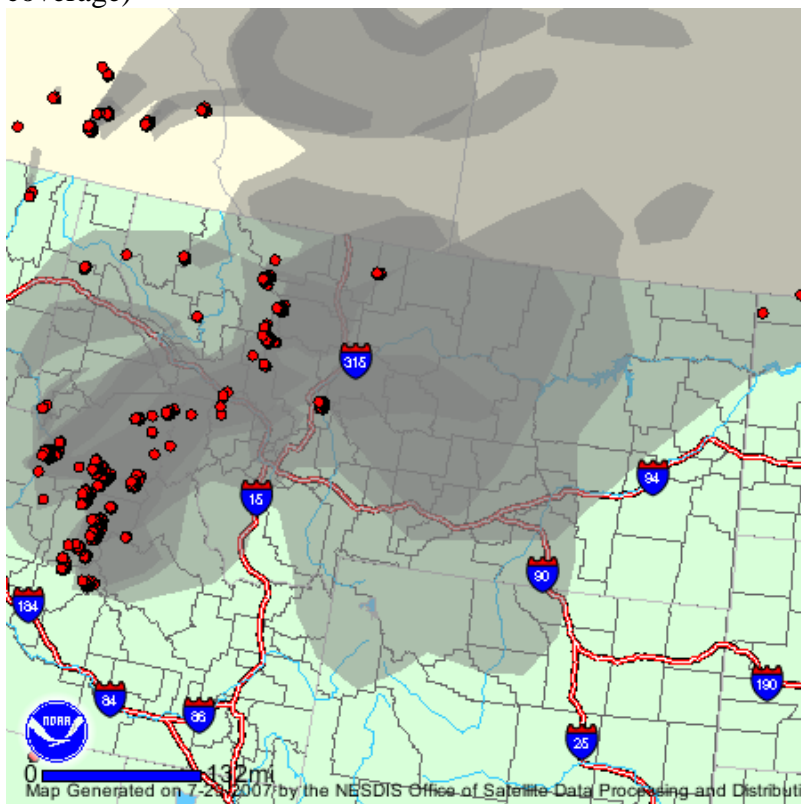


The two photos below are taken from the southwest corner of the Meriwether fire north of Helena last evening about 6 PM. (Photos taken by Candace Coefield)





This morning's analysis from NOAA's satellite services division shows the active fires in Montana and the smoke plumes combining and spreading downwind (the analyzed smoke is based on yesterday's satellite coverage, the fire detects are based on last night's satellite coverage)



Red indicates hot spot detected. Grey represents smoke seen by satellite. Fire size is exaggerated for visibility at this scale

To identify individual fires on graphic above go here:

http://activefiremaps.fs.fed.us/lg_fire2.php

Real time particulate information is currently available in most of the larger urban areas from several different sources including: DEQ run PM-10 BAMS and PM2.5 BAMS, NWS ASOS visibility monitors, and USFS remote access Nephelometers and BAMS.

This morning's smoke report is below, comparing particulate levels where we have information to MDEQ's Forest Fire health advisory levels.

Updated 10 AM July 29, 2007

Locations and severity of forest fire smoke reports since midnight of the date above at reporting stations.

HAZARDOUS	
VERY UNHEALTHY	
UNHEALTHY	Clinton (est) Bonner (est)
UNHEALTHY FOR SENSITIVE GROUPS	Great Falls Vis(12)
MODERATE	Whitefish T24 Kalispell T24 Polson (est) Ronan T24 Missoula T24 Hamilton T24 Helena T24 Butte T24 Cut Bank Vis(2) Chouteau T24

T1(x)	One-hour TEOM or BAM value (number of values)
T8(x)	Eight-hour average TEOM or BAM value(number of values)
T24	24 hour average TEOM or BAM value
Vis(x)	Visibility value(number of hours)
Vis(am/pm)	Visibility value from twice/day reporting stations
(est)	estimate

Local impacts in areas immediately adjacent to active fires are expected to exceed some or all of the advisory levels. DEQ recommends the use of local [visibility guidelines](#) to evaluate possible health risks and make informed activity decisions.

Forecast

The smoke aloft will mix down to the surface later this morning producing strong, transient impacts in the areas under the thickest portions of the plumes overhead. Areas that are already seeing strong impacts will see increased smoke levels for a short time but conditions should improve markedly in areas away from the local fire activity by noon. Smoke from the Mile Marker 124 fire east of Missoula in the Clinton area is making its way down the Clark Fork valley and will likely impact the east side of Missoula before surface heating turns the flow up canyon. The residual smoke aloft from yesterday's fire activity will continue to slowly make its way east today. Some of this smoke will mix down to the surface later this morning and will produce noticeable impacts for a few hours under the thickest parts of the plume. Southwesterly flow aloft will continue to push smoke from Idaho and Oregon into western and southwestern Montana today. Smoke levels in the currently affected communities will rise for few hours later this morning as the mixing height reaches the level of the smoke plume overhead. Most areas should see marked improvement by noon. The fire weather forecast for the day is favorable for increased fire activity levels on all of the local fires and more smoke is likely this afternoon and evening. The smoke impacts will generally be on the east and northeast sides of the fires as transport winds are from the west to the southwest. Residents near active fires need to remain aware of current conditions and use the [visibility guidelines](#) to guide their activity decisions as the situation changes.

[John Coefield](#), Meteorologist
Montana Department of Environmental Quality